



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	ATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/645,604 08/22/2003		8/22/2003	David Feldmeier	M4065.0573/P573-B	8591	
24998	7590 10/17/2005			EXAMINER		
DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP 2101 L Street, NW Washington, DC 20037				ANDERSON,	ANDERSON, MATTHEW D	
				ART UNIT	PAPER NUMBER	
		•		2186		

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450 www.uspto.gov

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

MAILED

Application Number: 10/645,604 Filing Date: August 22, 2003

Appellant(s): FELDMEIER ET AL.

OCT 17 2005

**Technology Center 2100** 

Thomas J. D'Amico & Jerome A. DeLuca For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed 9/16/05 appealing from the Office action mailed 3/3/05 and Advisory Action mailed 6/10/05.

Art Unit: 2186

#### (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

## (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

#### (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

#### (4) Status of Amendments After Final

No amendment after final has been filed.

# (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

#### (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

## (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

#### (8) Evidence Relied Upon

The LANCAM Publication; Music Semiconductor Application Note AN-N22
"A Method\* For Fast IPv4 CIDR Address Translation and Filtering Using the

MUSIC WidePort LANCAM, LANCAM, and LANCAM 1st Family"

The MUAC Publication: Music Semiconductor Application Note AN-N25

"Fast IPv4 And IPv4 CIDR Address Translation And Filtering Using the

MUACTM Routing Coprocessor (RCP)\*"

#### (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 56-87 are rejected under 35 U.S.C. 102(a) as being anticipated by Music Semiconductor Application Note AN-N22 (A Method\* For Fast IPv4 And IPv4 CIDR Address Translation And Filtering Using The MUSIC WidePort LANCAM ®, LANCAM ®, AND LANCAM ® 1 ST Family), hereinafter "LANCAM".

With respect to claims 56, 62, 65, 71, 73, and 77-81, LANCAM discloses:

a binary CAM for storing ternary hierarchical addresses comprising a communication system address and associated communication system address mask, as shown in Table 5;

each entry comprising a first value comprising the logically ANDed communication system address and its associated mask (as described on page 4), and a second value comprising the logically ANDed complement of said communication system address and its associated mask (as described on page 4), wherein each entry is positioned in the CAM based on the number of contiguous ones in said associated mask as described on page 2;

each entry comprising a two bit representation for each bit in said address, as disclosed in pages 2-3;

storing ternary entries in a binary CAM, as disclosed in pages 6-8;

With respect to claims 57, 64, 66, and 72, LANCAM discloses entries having the most contiguous ones located at the top of the CAM, and the least contiguous ones at the bottom of the CAM, as described in page 2.

Art Unit: 2186

With respect to claims 58 and 67, LANCAM discloses each of said n bits in said first value has an associated bit in said second value, and each of the bits and associated bit forming a binary pair which represents one bit of said address as two bits in the CAM, as described in page 4.

With respect to claims 59, 63, 68, and 71, LANCAM discloses a 1 in the address representing a 10 in the CAM, a 0 in the address representing a 01 in the CAM, a don't care in the address representing a 00 in the CAM, as disclosed in page 3.

With respect to claims 60-61, 69-70, and 75-76, LANCAM discloses the first value being stored in an upper portion of said entry and the second value in a lower portion, with each entry being 64 bits and n being 32, as shown in Table 5.

With respect to claims 73 and 77, LANCAM discloses searching a binary CAM to find a match of a ternary address by loading a first register with the address to be searched along with the complement of the address, loading the second register with the address to be searched along with the complement of the address, and associating each bit of the first register with one bit of the second register and with one bit of each entry in said binary CAM, determining whether a bit match occurs, and obtaining a match based on the greatest number of matches of corresponding bits, as disclosed on page 8 and in Table 7.

With respect to claims 74 and 77, LANCAM discloses declaring a bit match if the corresponding bit in the second register is a 1, or if the corresponding bit in the second register is a 0 and the corresponding bits of the first register and each entry in the binary CAM are identical, as disclosed in page 8 and Table 7.

With respect to claims 78-81, LANCAM discloses:

Art Unit: 2186

segmenting the binary CAM into blocks and arranged in the CAM such that the lowest CAM addresses contain the highest masks, and the highest Cam address contain the lowest masks, as disclosed in page 2;

storing addresses according to said block having a corresponding mask, as shown in page 2;

tracking the first address and the next free address of each of said blocks and the size of each block, as shown in page 5.

binary-encoding ternary conversion means wherein a 1 in the address representing a 10 in the CAM, a 0 in the address representing a 01 in the CAM, a don't care in the address representing a 00 in the CAM, as disclosed in page 3.

With respect to claim 82, LANCAM discloses a first group of address entries sharing a first said address mask and a second group of address entries sharing a second said address mask, said first and second groups being located at different locations of the CAM, as taught on page 3.

With respect to claim 83, LANCAM discloses comprising at least one vacant address entry location disposed within said CAM between said first and second groups of address entries, as shown in figures 5, 6, and 8.

With respect to claim 84, LANCAM discloses at least one vacant address entry location within said CAM adjacent at least one of said address entry groups, as shown in figures 5, 6, and 8.

With respect to claim 85, LANCAM discloses: receiving an address value in a comparand register of said CAM; matching a further plurality of addresses, including a subset of said communication system hierarchical addresses, to said address value; and outputting an

Art Unit: 2186

output hierarchical address of ,said further plurality of addresses according to respective storage locations of said further plurality of addresses, as shown in Table 7 on page 5.

With respect to claim 86, LANCAM discloses wherein said output hierarchical address of said further plurality has a storage location lowest among said respective storage locations of said further plurality of addresses, as shown in Figure 3 on page 7.

With respect to claim 87, LANCAM discloses wherein said further plurality of said communication system hierarchical addresses each includes at least one identical bit, as shown in Table 7 on page 5.

Claims 56-87 are rejected under 35 U.S.C. 102(a) as being anticipated by Music Semiconductor Application Note AN-N25 (Fast IPv4 and IPv4 CIDR Address Translation and Filtering Using the MUACTM Routing Coprocessor (RCP)), hereinafter "RCP".

With respect to claims 56, 62, 65, 71, 73, and 77-81, RCP discloses:

a binary CAM for storing ternary hierarchical addresses comprising a communication system address and associated communication system address mask, as shown in Table 5;

each entry comprising a first value comprising the logically ANDed communication system address and its associated mask (as described on page 4), and a second value comprising the logically ANDed complement of said communication system address and its associated mask (as described on page 4), wherein each entry is positioned in the CAM based on the number of contiguous ones in said associated mask as described on page 2;

Art Unit: 2186

each entry comprising a two bit representation for each bit in said address, as disclosed in pages 2-3;

storing ternary entries in a binary CAM, as disclosed in pages 6-8;

With respect to claims 57, 64, 66, and 72, RCP discloses entries having the most contiguous ones located at the top of the CAM, and the least contiguous ones at the bottom of the CAM, as described in page 2.

With respect to claims 58 and 67, RCP discloses each of said n bits in said first value has an associated bit in said second value, and each of the bits and associated bit forming a binary pair which represents one bit of said address as two bits in the CAM, as described in page 4.

With respect to claims 59, 63, 68, and 71, RCP discloses a 1 in the address representing a 10 in the CAM, a 0 in the address representing a 01 in the CAM, a don't care in the address representing a 00 in the CAM, as disclosed in page 3.

With respect to claims 60-61, 69-70, and 75-76, RCP discloses the first value being stored in an upper portion of said entry and the second value in a lower portion, with each entry being 64 bits and n being 32, as shown in Table 5.

With respect to claims 73 and 77, RCP discloses searching a binary CAM to find a match of a ternary address by loading a first register with the address to be searched along with the complement of the address, loading the second register with the address to be searched along with the complement of the address, and associating each bit of the first register with one bit of the second register and with one bit of each entry in said binary CAM, determining whether a bit match occurs, and obtaining a match based on the greatest number of matches of corresponding bits, as disclosed on page 8 and in Table 7.

Art Unit: 2186

With respect to claims 74 and 77, RCP discloses declaring a bit match if the corresponding bit in the second register is a 1, or if the corresponding bit in the second register is a 0 and the corresponding bits of the first register and each entry in the binary CAM are identical, as disclosed in page 8 and Table 7.

With respect to claims 78-81, RCP discloses:

segmenting the binary CAM into blocks and arranged in the CAM such that the lowest CAM addresses contain the highest masks, and the highest Cam address contain the lowest masks, as disclosed in page 2;

storing addresses according to said block having a corresponding mask, as shown in page 2;

tracking the first address and the next free address of each of said blocks and the size of each block, as shown in page 5.

binary-encoding ternary conversion means wherein a 1 in the address representing a 10 in the CAM, a 0 in the address representing a 01 in the CAM, a don't care in the address representing a 00 in the CAM, as disclosed in page 3.

With respect to claim 82, RCP discloses a first group of address entries sharing a first said address mask and a second group of address entries sharing a second said address mask, said first and second groups being located at different locations of the CAM, as taught on page 3.

With respect to claim 83, RCP discloses comprising at least one vacant address entry location disposed within said CAM between said first and second groups of address entries, as shown in figures 4, 5, and 7.

With respect to claim 84, RCP discloses at least one vacant address entry location within said CAM adjacent at least one of said address entry groups, as shown in figures 4, 5, and 7.

With respect to claim 85, RCP discloses: receiving an address value in a comparand register of said CAM; matching a further plurality of addresses, including a subset of said communication system hierarchical addresses, to said address value; and outputting an output hierarchical address of ,said further plurality of addresses according to respective storage locations of said further plurality of addresses, as shown in Table 7 on page 5.

With respect to claim 86, RCP discloses wherein said output hierarchical address of said further plurality has a storage location lowest among said respective storage locations of said further plurality of addresses, as shown in Figure 2 on page 5.

With respect to claim 87, RCP discloses wherein said further plurality of said communication system hierarchical addresses each includes at least one identical bit, as shown in Table 7 on page 5.

Application/Control Number: 10/645,604 Page 10

Art Unit: 2186

# (10) Response to Argument

The entirety of the Appeal Brief is concerned solely with the arguments that the Feldmeier Declaration of 2/8/05 is sufficient evidence to disqualify both the LANCAM and MUAC publications as prior art. In the declaration, *one* of the two inventors of the present application merely states that he and his co-inventor both co-authored the two publications, and that the subject matter of the publications relevant to the claims were derived from the two co-inventors. The Applicant maintains that this sworn declaration and his statements therein are, alone, sufficient to disqualify the publications as prior art.

The Applicant argues in page 11 of the Brief that the Final Office Action and Advisory

Action are incorrect in arguing that a sworn, unequivocal declaration submitted under Rule 1.132 is not evidence. While a Rule 1.132 declaration is "evidence", it is <u>not</u> supporting or underlying documentary evident as to the authorship of the publications. Appellant's unsupported statement, even though under oath, does not convince us otherwise. The simple fact remains that the Feldmeier declaration is self serving with absolutely no supporting or underlying documentary evidence, only the biased statements of a single inventor. <u>FACTS</u>, not conclusions, must be alleged. MPEP 716.01(c) clearly states that "to be of probative value, any objective evidence should be supported by <u>actual proof</u>." Particularly relevant to the present case, included in MPEP 713.01(c) are situations involving allegations that the author(s) of the prior art derived the disclosed subject matter from the applicant.

Evidence in the form of exhibits must accompany the affidavit or declaration. Each exhibit relied upon should be specifically referred to in the affidavit or declaration, in terms of

what it is relied upon to show. For example, the allegations of fact might be supported by submitting as evidence one or more of the following:

- (A) attached sketches;
- (B) attached blueprints;
- (C) attached photographs;
- (D) attached reproductions of notebook entries;
- (E) an accompanying model;
- (F) attached supporting statements by witnesses, where verbal disclosures are the evidence relied upon. Ex parte Ovshinsky, 10 USPQ2d 1075 (Bd. Pat. App. & Inter. 1989);
- (G) testimony given in an interference. Where interference testimony is used, the applicant must point out which parts of the testimony are being relied on; examiners cannot be expected to search the entire interference record for the evidence. Ex parte Homan, 1905 C.D. 288 (Comm'r Pat. 1905);
- (H) Disclosure documents (MPEP § 1706) may be used as documentary evidence of conception.

The prevailing question in this appeal is essentially an evidentiary one, namely, the sufficiency of applicant's showing to establish that the subject disclosure of the publications were his original work. It was incumbent, therefore, on appellant to provide a satisfactory showing which would lead to a reasonable conclusion that he is indeed the author. No such supporting or

Art Unit: 2186

underlying documentary evidence was submitted in the Feldmeier declaration. No actual proof was submitted to make this declaration of any probative value.

Contrary to Applicant's arguments, the current circumstance does not apply to *In re Katz* wherein a simple statement is all that is required for the declarant to establish that the publication in question was his own work. In such an *In re Katz* situation, evidence as to the co-authorship of the publication has already been established by the printing of their names on the publication. The current circumstance, though, shows that the LANCAM and MUAC publications are silent as to their authors. Since no authorship has been established by the publications themselves, further supporting or underlying documentary evidence is required to support the declarant's statements of authorship.

In addition to lacking any actual proof showing supporting or underlying documentary evidence, the Feldmeier declaration also lacked any statement attributing the publications as the sole declarant's <u>own</u> work, or else having the disclaiming declaration signed by each and every co-author. Applicant argues on pages 12-13 of his Brief that it is clear error to hold that disclaiming affidavits or declarations by the other authors are required to support applicant's position that he is, in fact, the sole inventor of the subject matter. The problem with this argument is that the Feldmeier declaration never states that the declarant is the <u>sole</u> inventor. The declaration states co-inventorship and co-authorship.

In page 13 of the Brief, the Applicant paraphrases from *In re Katz*, saying that the Final Office Action and Advisory Action "should not have engaged in further speculation as to whether appellant's view was shared by his coauthors but rather should have accepted" the Feldmeier declaration. This argument though disregards the essential point of *Katz* wherein the

appellant clearly stated in the declaration that he was the sole inventor and the coauthors were merely working under his direction. The Feldmeier declaration therefore does not correspond, as not only is no statement made as to sole/own inventorship, but the declaration goes so far as to specifically name another as a co-author and co-inventor. Therefore, because declarant did not disclaim the publication as his <u>own</u> work, then such a statement (without further actual proof) begs further speculation.

For these reasons the Feldmeier declaration was considered insufficient, and the rejections based on LANCAM and MUAC are maintained.

#### (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Matthew D. Anderson Primary Examiner

EDDIE CHAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Conferees:

MATTHEW KIM
SUPERVISORY PATENT EXAMINER

**TECHNOLOGY CENTER 2100**